

Application No. 10/735,365

Reply to Office Action

*AMENDMENTS TO THE CLAIMS*

Cancel claims 1-3, 6-11, 14 and 17-20. Rewrite claims 12 and 15 as follows:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1 - 11. (Canceled).

12. (Currently Amended) A liquid spraying system comprising:  
a plurality of shower header spray devices, each

said spray devices each having an elongated spray header having a plurality of laterally spaced liquid spray nozzles, an elongated cleaning brush ~~on~~ having a rotatable brush shaft housed in the spray header for cleaning inlet apertures of the liquid spray nozzles, the said brush shaft being supported to impart simultaneous axial movement of the brush shaft as an incident to rotation thereof, a drain opening in communication with a downstream end of the spray header, a valve member mounted on the said brush shaft for sealing the spray header from the drain opening, and a motor operatively connected to the brush shaft for rotating the brush shaft to cause the brush shaft to move with a combined rotary and axial movement such that the cleaning brush moves in a rotating and sweeping fashion across the inlet apertures of the spray nozzles, the said motor having a microprocessor-based control circuit programmed for driving the brush shaft to ~~pre-selected positions to execute a cleaning operation, to rotate the brush shaft in a first rotational direction to move the valve member to an open position to allow discharge of liquid with debris removed by the cleaning brush from the inlet apertures through the drain opening and to rotate the brush shaft in a reverse rotational direction to return the valve member to a sealed position;~~

a plurality of local operation controllers, each said local operation controllers each being connected to an associated spray device for transmitting control signals to the control circuit of the motor of the associated spray device to control said motor ~~to execute~~ in executing a cleaning operation on said associated spray device,

Application No. 10/735,365

Reply to Office Action

a central operation controller connected to each of the local operation controllers and being operable to send control signals to each local operation controller, and

said microprocessor based control circuit for each motor being programmed to rotate the brush shaft a pre-determined number of turns in one rotary direction in response to a first control signal from the local operation controller for cleaning the inlet apertures and allowing discharge of liquid and debris removed by the cleaning brush from the inlet apertures to discharge through the drain opening and to rotate the brush shaft a pre-determined number of turns in an opposite rotary direction in response to a second control signal from the local operation controller to return said valve member to a position closing said drain opening.

13. (Canceled).

14. (Canceled).

15. (Currently Amended) A liquid spraying system as in claim 14 12, wherein each local operation controller further includes a start button for sending a trigger signal to trigger said each local operation controller to execute a cleaning operation on an associated spray device.

16. (Original) A liquid spraying system as in claim 12, wherein each local operation controller further includes a signaling device for indicating completion of a cleaning operation.

17-20. (Canceled).